

# **Two Eagle Vegetation Management Project**

## **Visuals and Scenery Report**

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## Visuals / Scenery Resources

### *Executive Summary*

The no action alternative would not address the vegetation conditions that are the beyond the historic range of variability. Alternative 1 would not reduce the risk of uncharacteristic wildfire that could cause undue effects to scenery, nor will it move the stands toward the desired condition.

Alternatives 2, 2M, and 3 would move stands toward desired future conditions which are within historic range of variability, and reduce the risk of uncharacteristic fire, while keeping effects to scenic integrity to a minimum, meeting all standards. By moving stand conditions toward the historic range of variability, the area will be more resilient if changes in climate bring drier and warmer conditions.

The vegetation management objectives would be achieved without creating unnatural appearing forms, lines or colors. The selective overstory removal and thinning would create no openings that are dissimilar to existing openings in the area, therefore the retention visual quality objectives (VQO) of the Eagle Creek Wild and Scenic River would be maintained.

### **Introduction**

Scenery provides the setting for all activities experienced by forest visitors. Each setting is comprised of scenic attributes that are derived by the environmental context of topography, geology, and climate. These underlying factors are expressed and highlighted by the scenic attributes that they support. Scenery, just as any other resource, must be cared for and managed for future generations. The activities proposed by the Two Eagle Project potentially affect the current and future condition of these valued scenic resources. Managing scenery resources involves the process of analyzing effects, implementing scenic character goals and applying scenic conservation design features to achieve the WWNF Land and Resource Management Plan (Forest Plan) desired conditions and direction for scenery resources.

The Eagle Creek Wild and Scenic River (WSR) runs through the project area. The outstandingly remarkable values are designated for unique, rare, or exemplary features significant at a regional or national level. Scenery is a designated outstandingly remarkable value for the highly diverse and scenic attractions of the Eagle Creek drainage, and the overall undisturbed natural appearance of the valley. To protect and enhance this outstandingly remarkable value is a goal of this project. Harvest treatments that are within this project are expected to meet the retention VQO, and to improve the resiliency of the stands surrounding the WSR corridor.

The primary purpose of this section is to disclose the effects of the alternatives to scenery resources.

**Regulatory Framework.** The National Environmental Policy Act of 1969 (NEPA) states that it is the “continuing responsibility of the Federal Government to use all practicable means to assure for all Americans, aesthetically and culturally pleasing surroundings.” NEPA also requires “A systematic and interdisciplinary approach which would insure the integrated use of the natural and social sciences and the environmental design arts into planning and decision-making which may have an impact on man’s environment.”<sup>1</sup> To accomplish this, numerous Federal laws require all Federal land management agencies

to consider scenery and aesthetic resources in land management planning, resource planning, project design, implementation, and monitoring.

Several USDA handbooks have been developed to establish a framework for management of visual resources, including, but not limited to:

National Forest Landscape Management Volume 2, Chapter 1 the Visual Management System (Agriculture Handbook 462, USDA Forest Service 1974) and

Landscape Aesthetics, A Handbook for Scenery Management (Agriculture Handbook 701, USDA Forest Service 1995).

This evaluation applies current National Forest Scenery Management methodology in conjunction with existing Wallowa-Whitman National Forest (WWNF) Plan direction. This includes scenery sustainability concepts described in Scenery Management System (SMS) Handbook Appendix J – Recommended SMS Refinements. It relies on field studies and photography from inventoried sensitive viewpoints and other views of the project area, as well as coordination with project interdisciplinary team (ID Team) members, and consideration of public preferences for scenic quality. Cumulative scenic quality was within the geographic scope of roadways and other viewpoints within and adjacent to the project.

Integration of this scenery analysis assures the Two Eagle Project is consistent with scenery-related Wallowa- Whitman National Forest direction, Forest Service (FS) policies, and applicable elements of FS Visual Management and Scenery Management systems. Refer to Appendix B of the Scenery Management System Handbook #701 for a complete list of references requiring Forest Service management of scenery and aesthetics.

The Eagle Creek Wild and Scenic River Management Plan establishes standards and guidelines for the WSR corridor. The standards and guidelines are as follows for that portion of the corridor within the project area:

Table 1. Landscape management. Manage visual resources to meet the following visual quality objectives (VQOs) within the corridor and adjacent seen areas.

<b>River Classification</b>	<b>Visual Quality Objective</b>
Wild	Preservation is the norm, all distance zones
Scenic	Retention foreground Retention middleground Retention background
Recreational	Retention foreground Retention middleground Retention background

River corridor viewshed management direction has been established in the "Eagle Creek Viewshed Corridor Plan" completed by Walker and Macy, April 1992. The Viewshed Corridor Plan will be used to achieve protection and enhancement of the Scenic outstandingly remarkable value (ORV). In particular, the VQO maps, visual sensitivity maps, desired future condition (DFC) recommendations, and suggested mitigations will be considered in all activity planning. The DFC recommendations will guide management of overall landscape character and specific activities, including: Vegetation Management, Developed Recreation Sites, Dispersed Recreation Sites, Transportation Facilities, Administrative Sites, Private Land Development, and Other Uses i.e. Utilities Right of ways (ROW)]

Analysis of the visual effects of proposed activities within the corridor will be considered from two vantages: all existing riverside viewpoints and from Sensitivity Level 1 travelways within the corridor (Forest Roads 77, 7755, Main Eagle Trail).

Landscapes containing negative visual elements will be rehabilitated. Landscapes may be enhanced by opening views to distant peaks, unique rock forms, unusual vegetation, or other features of interest, consistent with protection and enhancement of ORVs, water quality and free-flow.

Short-term visual impacts of prescribed fires that depart from established VQOs direction may be considered acceptable if necessary to protect and enhance scenic values and to meet the VQOs in the long term. Such departures must be approved by a landscape architect.

(Eagle Creek WSR Management Plan Standards and Guidelines, pg. 13, 14.)

This visual analysis was conducted from the riverside viewpoints, and the stated travelways. The proposed treatments were considered in light of these standards and guides. Thinning for desired species, and for the health and vigor of the stands were designed to move the stands toward the desired future condition. Prescribed burning was designed to protect and enhance the scenic values by making the stands on the ridges above more fire resistant.

## **Overview of Issues Addressed**

### **Issue Indicators**

The two indicators used to measure the effects to scenery resources are scenic integrity and scenic stability. These two indicators evaluate the intensity and duration of effects as well as the degree to which the alternatives would affect the stability of scenery attributes over the long term.

Scenic Integrity is the degree to which the scenery is free from visible disturbances that detract from the natural and socially valued appearance, including disturbances due to human activities or extreme natural events inconsistent with the historic range of variability (Fire Regime Condition Class, Sciarrino 2003).

Scenic Stability is the degree to which the Desired Scenic Character can be sustained through time and ecological progression (Landscape Aesthetics, USDA 1995).

## ***Affected Environment***

### **Existing Condition**

#### **Existing Scenic Integrity**

Scenic Integrity is measured on the Wallowa-Whitman National Forest through Visual Quality Objective levels defined by the FS Visual Management System's Chapter 1 USDA Handbook # 462. These levels and descriptors of how people perceive them are shown below.

Table 2. Visual Quality Objectives and Perceived Alteration

<b>Visual Quality Objective</b>	<b>Scenic Integrity as people perceive it</b>
Preservation	Unaltered, visually complete or intact
Retention	Unnoticeably altered
Partial Retention	Slightly altered
Modification	Moderately altered
Maximum modification	Heavily altered
Unacceptable modification	Unacceptably altered

The existing scenic integrity meets the visual quality objective of the Forest Plan. Within the project area there are evidences of past activities. Shelterwoods are apparent within areas of modification. Partial removal treatments can be seen in partial retention areas, stumps area apparent. Along with the evidences of treatments are the indirect effects of additional variety in color and texture as deciduous shrubs and larch species have begun to take hold. There are large areas of natural appearing landscapes. Overall, from middleground and background views there is little evidence of man's activities in this project area.

### **Sensitive Viewsheds**

FS 77 Rd - This road runs north to south along the western edge of the project area. The road is located along the broad ridge and views into the project are of the upper slopes and ridges of the landscape. The steeply incised drainages are for the most part not visible from this route. The scenery is primarily timbered with scattered openings varying from one to ten acres in size. The openings are of grass slopes which provide diversity in pattern, form and color contrast. There is evidence of past project work which has created openings visible in foreground views. The openings have grasses and low growing deciduous shrubs. Western larch is also coming up in these openings. The vegetation in these openings provides dramatic fall color diversity. Currently, the scenery meets partial retention. The VQO's along this route are partial retention and modification.

FS 7755 Rd – This road runs adjacent to the Eagle Creek Wild & Scenic River corridor at the project's eastern boundary. The road is located primarily in a timbered canyon bottom, with periodic views of broad grassy meadows, the river, and craggy background peaks. The diversity of pattern, form, and color reinforces the ORVs of the Wild & Scenic River. Though past management activity is evident, most casual visitors to the 7755 Rd will perceive it as a primarily natural-appearing landscape that meets the VQO of Retention.

### **Existing Scenic Stability**

A new scenery indicator has been developed for use within the FS Scenery Management System (applied in this analysis according to procedures described in the 2007 Recommended Scenery Refinements, Appendix J of the SMS Handbook #701.

For the Two Eagle project area, the existing Scenic Stability analysis focuses on the single major scenery attribute of vegetation, addressing its ecosystem conditions and stresses identified by field observation and Fire Regime Condition Class (FRCC) coarse-scale data on vegetation and fire history data (Fire Regime Condition Class, Scairino, 2003).

Scenic stability levels are defined as follows:

#### ***Scenic Stability Level Definitions***

**Very High Stability**—All dominant and minor scenery attributes of the valued scenic character are present and are likely to be sustained.

**High Stability**—All dominant scenery attributes of the valued scenic character are present and are likely to be sustained. However, there may be scenery attribute conditions and ecosystem stressors that present a low risk to the sustainability of the dominant scenery attributes.

**Moderate Stability**—Most dominant scenery attributes of the valued scenic character are present and are likely to be sustained. A few may have been lost or are in serious decline.

**Low Stability**—Some dominant scenery attributes of the valued scenic character are present and are likely to be sustained. Known scenery attribute conditions and ecosystem stressors may seriously threaten or have already eliminated the others.

**Very Low Stability**—Most dominant scenery attributes of the valued scenic character are seriously threatened or absent due to their conditions and ecosystem stressors and are not likely to be sustained. The few that remain may be moderately threatened but are likely to be sustained.

**No Stability**—All dominant scenery attributes of the valued scenic character are absent or seriously threatened by their conditions and ecosystem stressors. None are likely to be sustained, except relatively permanent attributes such as landforms (SMS Handbook, Appendix J – Recommended SMS Refinements, 2007).

### **Potential Vegetation Groups, Stand Structure and Historical Range**

There are definite trends in the species composition, and stand structure that pose increasing risk to scenery resources. The project area has two forested potential vegetation groups (PVGs), well described in the silvicultural section; due to fire suppression activities over the years much of the dry upland forest type has been transitioning to more mixed conifer. The implications of these trends are that the majority of the project area is shifting from low or mixed intensity fire behavior to high intensity fire. The stand structure of most of the project area is outside the historical range in all PVGs. These trends confirm the reduced resiliency of these stands to uncharacteristic fire that would burn larger and more intensely. Within this project area the fire occurrence rates are high due primarily to lightning strikes, (See the Fire and Fuels Sections) which show that the likelihood of a fire start is relatively high. With fuel loads and crown base heights as they are the flame lengths can easily cause a crown fire which makes direct fire suppression tactics feasible.

### **Existing Scenic Stability Summary**

Trends and conditions that exist in the project area are creating greater and greater hazard to the scenic resources. Species composition is becoming increasingly dominated by grand fir and Douglas-fir which are non-fire resilient species. These dense multi-layered stands are very susceptible to large stand replacement fire. The existing scenic stability of the Two Eagle area is very low.

### **Desired Condition**

#### **Forest Plan Direction**

Forest Goals- Landscape Management: To manage all National Forest lands to obtain the highest possible visual quality, commensurate with other appropriate public uses, cost and benefits.

#### **Standards and Guidelines**

1. VQO's. Meet visual quality objective through management techniques described in National Forest Landscape Management, Volumes 1 and 2, and the Wallowa-Whitman National Forest Visual Management Plan (Visual Management System, 1974, Wallowa-Whitman National Forest Land and resource Management Plan, 1995).
2. Retention Foreground. In retention foregrounds the area regenerated per decade should not exceed 7 percent or be less than 3 percent of the suitable forest land within the viewshed. Maximum seen area disturbed at any one time should not exceed 10 percent within any viewshed. Limit regeneration unit size to that which meets retention and desired character including consideration of future entries and regrowth. The approximate range of sizes necessary to accomplish this is ½ to 2 acres in the immediate foreground (less than 500 feet) and 3 to 5 acres in the foreground greater than 500 feet from the road or trail. Units against road or trail edges should be shelterwoods or selection cuts rather than clearcuts. Target tree size is 36 inches where biologically feasible. (Note: Seen area disturbance requires visible evidences of disturbance that do not meet the VQO from a singular viewing platform identified as Sensitivity Level 1 roads.)
3. Partial Retention Foreground and Retention Middleground. In partial retention foreground and retention middleground, the area regenerated per decade should not exceed 9 percent or be less

than 5 percent of the suitable forest land within and viewshed. The maximum seen area disturbed at any one time should not exceed 14 percent of any viewshed. Limit regeneration unit size to that which meets partial retention and desired character including consideration of future entries and regrowth. The approximate range of sizes necessary to accomplish this is ½ to 2 acres in the immediate foreground (less than 500 feet) and 3 to 5 acres in the foreground greater than 500 feet from the road or trail. Target size tree in foreground is 26 inches where biologically feasible.

4. Partial Retention Middleground. In partial retention middleground, the area regenerated per decade should range between 8 and 10 percent. Limit maximum regeneration unit size to 10 acres. Maximum area disturbed at any one time should not exceed 20 percent.
5. Created Openings. Consider a created opening to no longer be an opening, visually, when trees reach 20 feet in height. Rotation periods will be sufficient to grow large tree character in viewshed foregrounds.
6. Resolving Conflicts. Where conflicts develop between visual quality objectives and timber or range management objectives, these conflicts will be resolved in favor of meeting the visual objectives. Where conflicts occur between old-growth objectives and visual objectives, old – growth will have priority.
7. Viewshed Plans – Plans will be prepared for all Level 1 viewsheds that will refine boundaries, establish protect design criteria, and identify opportunities for scenic enhancement, and set entry priorities and timing (Wallowa-Whitman National Forest Land and Resource Management Plan, 1995).

### **Visual Resource Direction within the Wild and Scenic River Corridor**

Eagle Creek is a designated Wild and Scenic River. The project area drapes over the Recreation section of the river. The recreation segment is from the Eagle Cap Wilderness boundary near Humming Bird Creek to Paddy Creek. The designation covers a ¼ mile width from the high water mark on both sides of the river. Scenery is recognized as an outstandingly remarkable value (ORV) in the Eagle Creek corridor and thus requires protection and enhancement under the provisions of the Wild and Scenic Rivers Act. The scenery, described as an ORV is as follows:

“The designated portion of Eagle Creek possesses a great deal diversity in landform, water, color, and vegetation, notable in the geographic region. Some of the attractions that combine to create Eagle Creek’s scenic beauty are the glaciated landscape of the upper portion, the steep forested canyon with numerous rock pinnacles in the middle portion, and the terraced basalt canyon of the lower portion. In addition, there is the diversity of vegetation, including the lush meadows, mixed-conifer and ponderosa pine forests, and grassy openings; and the variety of the stream’s rapids, waterfalls and deep pools. Even though the Eagle Creek drainage has been a focus of human interest since the turn of the century, visual impacts due to modifications are relatively minor, and the drainage still presents an overall natural landscape pleasing to forest visitors. The preliminary finding agrees with Congress that scenery in the Eagle Creek corridor is an outstandingly remarkable river value” (Eagle Creek Wild and Scenic River Management Plan, 1993).

The desired future condition stated for the Retention in the Wild and Scenic River corridor is stated as follows:

“The areas with a VQO of Retention would be characterized as a natural appearing landscape in which management activities are not visually evident. There will be a pleasing variety of open and closed forest spaces, with accentuation of views toward mountain tops, hillsides, and valley floor meadows. A pleasing mix of tree species and ages, including deciduous species, will also

be present. Emphasis will be to perpetuate a characteristic landscape that visually mimics natural processes. Late seral stages, large trees, and increased desirable species (ponderosa pine, larch, aspen, and hardwoods) will be emphasized in the corridor. Campgrounds will be predominantly screened from the road and river. Activities will be subordinate or unnoticed by forest visitors.” (Eagle Creek WSR Management Plan, 1993, pg. 9)

The standards for scenery within the Eagle Creek Wild and Scenic River corridor are shown in the table below:

Table 3. Visual Quality Objectives in the Wild & Scenic River Corridor

River Classification	Visual Quality Objective
Wild	Preservation is the norm, all distance zones
Scenic	Retention foreground Retention middleground Retention background
Recreational	Retention foreground Retention middleground Retention background
Recreation (trailed river section)	Preservation – all distance zones

The project area is comprised of recreation classification; therefore retention is the VQO within the wild and scenic river corridor.

**Sense of Place.** Sense of place is addressed to display how the area is perceived by the public, and to display the physical setting in which the project area lies. The Wallowa-Whitman NF uses the Sense of Place definition in Appendix J : Sense of Place: *“The identity of a place created by people’s social meanings and attachments, including valued scenery and recreation settings, cultural and spiritual values, economic, social and biophysical characteristics.”*<sup>14</sup> Managers using the concept of sense of place must define a specific framework for the definition and use of sense of place.

The Forest Service has developed the Recreation NICHE process for recreation facilities analysis. This process was developed to define the particular recreation niche the forest could provide for the public. The Forest defined spatial units that had particular characteristics which could support a defined set of recreational experiences. The WWNF conducted a recreation facilities analysis which characterized the forest and defined spaces in terms of use and sense of place.

The project area lies primarily within the Wallowa Mountains. The characterization of this area is as follows:

### W-W Niche Statement

A Forest’s recreational program niche is reflective of its “defining or unique characteristics and abilities”. For the Wallowa-Whitman National Forest, this niche spans 2.3 million acres from the central Blue and Wallowa Mountains in northeast Oregon across the Snake River into the Seven Devils Mountains in western Idaho. These diverse landscapes distinguish the Forest’s 3 main areas, Hells Canyon, the Wallowa Mountains, and the Blue Mountains. Visitors and local residents return to the Forest each year to enjoy a unique blend of: outstanding rugged scenery, backcountry and wilderness exploration; a variety of wild and scenic rivers and mountain lakes; and Native American and pioneer history.

Wallowa Mountains – Home of the Eagle Cap Wilderness, this setting is classically pristine with high alpine areas and powerful landscapes. Several Wild and Scenic rivers and high elevation lakes serve as destinations.



Eagle Creek – The diversity of landforms, water, color, and vegetation presents throughout the designated portion of Eagle creek is one of the most attractive attributes of the river corridor. Rock outcroppings are abundant and at times dramatic. Dark forested hillsides facing north are contrasted by south facing grassy slopes that are sparse of trees. The valley floor alternates between flat meadows and narrow gorges as the river changes from calm, meandering and sometimes deep, to swift and shallow (Eagle Creek Wild and Scenic River Management Plan, 1993).

Two Eagle Project Area - This landscape is a steeply incised canyon land at the base of steep sub alpine peaks. The drainages are a major component of the scenery. Steep slopes are covered with a mosaic of coniferous forest and grassy south slopes. Western larch provides fall color and ponderosa pine provide open park-like stands of large tree boles amidst understory grasses and shrubs. Riparian areas support deciduous trees and shrubs that provide diverse fall color. Cottonwood stands can be found in places where moisture is available. Rock outcrops punctuate the scenic views. Eagle Creek is a prominent visual feature in the canyon bottom.

## **Desired Scenic Character**

**Broad landscape-** The Two Eagle area is adjacent to the Eagle Cap Wilderness from which Eagle Creek flows down through a steeply incised canyon. The project lies to the northwest of Eagle Creek, and the scenic character is a compilation of scenic attributes that are supported by the ecological context. These scenic attributes make up the scenic character. In the Two Eagle area the scenery is influenced heavily by the steeply incised canyons. The basalt rock formations provide strong vertical features on the steep slopes. The deciduous vegetation in the riparian areas provides fall color and textual diversity, as well as shade for recreation sites. The ponderosa pine stands have a strong visual characteristic of large trees in open park-like stands. The mixed conifer stands provide multi-layered characteristics and small openings create a mosaic across the timbered landscape. Eagle Creek and its tributaries are very aesthetically striking. All these attributes create very attractive scenery. The major scenic attributes are the timbered vegetation that is diverse and viable, the streams and the riparian deciduous vegetation, and the steep mountainous terrain. The minor scenic attributes are the rock outcrop formations.

## **Scenic Character Context**

The Blue Mountains section is the western most section of the Middle Rocky Mountain Steppe. The terrain has been formed by metamorphic and volcanic activity which developed mountainous landforms. Today, the mountains are dissected by glacial and fluvial erosion processes. The project area is dissected most prominently by Eagle Creek and West Eagle Creek. Coniferous vegetation spreads across the broad ridge tops, down the drainages and across north facing slopes. South and west facing terrain has open grassy slopes. Riparian vegetation along streams is deciduous poplar, alder and willow. Basalt rock outcrops accentuate the steep faces of the stream corridors. Culturally, the area has been utilized by Native American tribes which utilized burning practices to improve the production of berries, big game forage, and to drive game. These fires as well as lightning caused fires thinned the non-resistant tree species from the stands, creating an open forest dominated by large ponderosa pine and western larch. Small cottonwood stands are found where conditions support them (Ecological Subregions of the United States: Section Descriptions, 1994).

## **Scenic Attractiveness**

“Scenic attractiveness is the primary indicator of the intrinsic scenic beauty of a landscape and of the positive response it evokes in people” (Landscape Aesthetics, USDA, 1995). Based on commonly held perceptions of the beauty of landform, vegetation pattern, composition, surface water characteristics, and land use patterns and cultural features, the scenery is rated on a three point scale:

Class A – Distinctive, where landform, vegetation patterns, water characteristics and cultural features combine to provide unusual, unique or outstanding scenic quality.

Class B – Typical, where landform, vegetation patterns, water characteristics and cultural features combine to provide ordinary or common scenic quality.

Class C – Indistinctive, where the landscape does not have characteristics that add to the variety, unity, vividness, mystery, intactness, order, harmony or uniqueness of the scenery.

The Two Eagle has areas of Class A and Class B scenic attractiveness. The scenic attractiveness rating is applied to the process of evaluating the value of the area’s scenery resource.

## **Landscape Visibility**

The area roads provide varying degrees of visibility of the project units. These roads are assigned sensitivity levels in the Forest Plan. These concern levels are the measure of the degree of public importance placed on landscapes viewed from travelways and use areas. Levels are attributed by use

levels, viewer interest in scenery and duration of view” (ibid). The sensitivity levels are used to determine the appropriate visual quality objective for areas visible from the particular road or use area.

This project is located in a steeply dissected landscape. Therefore the visibility is variable. The steep slopes of the Eagle Creek drainage are visible where roads are present on the opposite side of the drainage. The project units that are located on the upper plateaus are less visible. The timber along these roads limits visibility, and project units would be seen for short durations as one traverses the road. From higher elevations such as Flagstaff Butte, much of the Two Eagle area is visible from a mid to background distance.

### Scenic Classes

Scenic classes are derived from the scenic attractiveness, visibility and sensitivity levels. The scenic classes are a system of classification describing the importance or value of a particular landscape or portions of the landscape. Scenic classes range from class 1 being of very high value, to Class 7 being of low value. The forest has inventoried and classified the forestlands, and assigned visual quality objectives by scenic class. Class 1 was given a VQO of Preservation.

Table 4. Scenic Class, Visual Quality Objective, and Scenic Integrity Level

Scenic Class	Visual Quality Objective	Scenic Integrity level
1	Preservation	Very High
2	Retention	High
3	Partial Retention	Moderate
4	Modification	Low
5	Maximum Modification	Very Low
6	Unacceptable Modification	Unacceptably Low

### Scenic Stability

Scenic stability is the degree to which the desired scenic character can be sustained through time and ecological progression. For the Two Eagle area, the existing scenic stability analysis focuses on the single major scenery attribute of vegetation, addressing its ecosystem conditions identified by field observation and Fire Regime Condition Class (FRCC) 7 coarse-scale data on vegetation and fire history data. Ecosystem changes to other minor scenery attributes such as landform, rock outcrops, and winter snowfall are not as critical to the Two Eagle project area’s scenic character as its vegetation, since these changes are relatively stable over time regardless of fire behavior and human activities.

Evaluating scenic stability is done by considering conditions necessary to sustain desired scenic character of stands within the natural and historic range of the landscape. Appropriate stand density, species composition, and fuel loads are necessary for stands to maintain the inherent characteristics through their lifecycle. When trends such as increasing stand density, encroachment of less resilient species, increasing fuel loads, and high levels of mortality exist, the expected consequences are change in the scenic

character that are beyond the historic scale. Examples of these consequences are large canopy openings from intense wildfires, large stands of dead and dying timber, and loss of distinctive characteristic such as open, large tree character pine stands, lodgepole pine stand mosaics and multi-layered mixed species stands. Gradual trends over time have altered the species composition, stand structure, and age classes of the forest vegetation. Stands of large mature ponderosa pine that provide an open forest are diminished due to encroaching mixed conifer species, and past harvest practices that removed pine to release shade tolerant species.

Much of the coniferous vegetation is trending toward unsustainable conditions. Stocking levels, fuel loads, and species composition have departed from the reference/historic conditions. The historic fire regime of the ponderosa pine type is one of frequent low-intensity fires which have maintained lower stand densities, and fuel loads at a healthy sustainable level. This low-intensity fire regime maintains a sustainable species composition of predominantly fire-resistant ponderosa pine. These conditions are specifically rated as fire regime condition class 2 and 3 which indicate that a fire occurrence would most likely burn at higher severity and at a larger scale than that which is historically characteristic.

These conditions are rated at very low scenic stability because known scenery attributes such as the open stands of ponderosa pine, and the aspen stands are threatened by uncharacteristic fire and insects and disease due to these conditions.

## ***Environmental Consequences***

### **Methodology**

The scenery effects analyses used for this section are those found in the Scenery Management Handbook #701, Appendix J. Scenery management is based on the classic aesthetic factors of form, line, color and texture, as well as the principles of sense of place. “Scenic integrity measures the amount of natural or socially valued appearance in a landscape along with the amount of visual disturbance that contrasts with and detracts from the appearance (the valued scenic character) existing at the time of measurement.” “Scenic stability is an indicator of the ecological sustainability of the scenic character’s valued attributes” (Landscape Aesthetics, USDA, 1995, Appendix J, 2007).

### **Incomplete and Unavailable Information**

Information necessary for evaluating scenery effects is sufficient.

### **Spatial and Temporal Context for Effects Analysis**

The effects to the scenery resources can be short term and long term. Short term is less than 5 years, and long term is 5 years to 50 years. Effects that are eliminated by the natural course of a single growing season are not considered effects because they are so short lived. Most treatments have long term effects while the logging activities such as cable yarding, skidding and slash burning are usually short-term effects lasting less than 5 years.

The project analysis area is the area from which the proposed treatments can be visibly discerned. Most of the analysis is done within the project boundary with the exception of Summit Point which is a Trailhead and Fire lookout that affords a broad view of the project area.

The Scenery Management Handbook #701 is the source for scenery resource analysis.

## **Direct and Indirect Effects**

### ***Alternative 1 – No Action***

The No Action alternative would allow existing conditions and trends to remain and continue. Although a no-action alternative would create no effects to the scenic integrity and meet all the visual quality objectives, it would leave conditions that put much of the scenic attributes at risk.

A no action alternative would have no short term effects to scenic integrity, or scenic stability. Existing scenery integrity and scenic stability would remain the same, and the visual quality objectives would be met.

The indirect long term effects related to the existing conditions and trends could be substantial. Although the effects of stand replacement fire are not permanent, they are certainly long term. The overstocked stands are under greater and greater stress which is likely to lead to insect and disease epidemics. Fuel loads within the stands increase the hazards of stand replacement fire. All of these conditions will continue to degrade the scenic stability as stands crowd out fire resistant species and cottonwood stands.

In the event of a stand replacement fire the scenic integrity would likely be greatly reduced by uncharacteristic fire because the firefighting opportunities would be limited due to fuel conditions that effect flame lengths.

In addition to the loss of large stands of trees, there are also other effects such as those associated with fire suppression efforts in and around capital investments such as campground, trailheads and along roads which serve as suppression points and fire lines. Noxious weeds are often another effect that occur after the fire event has occurred.

### **Effects Common to all Action Alternatives**

The effects of specific prescriptions are described in this section.

#### **Commercial Thinning-(HTH)**

Thinning from below opens up the stands by removing the smallest diameter trees. This provides greater viewing distances into the stand which is preferable. The appearance of the stands is improved by this treatment by making them appear healthier. The reduction tree stocking levels improves the resilience of the stands by reducing stress, and ladder fuels, which reduces the risk of insect and disease epidemic occurrence, and stand replacement wildfire. This prescription also targets species that are not fire resistant, therefore further improving the resiliency of the stands. These are benefits that contribute to the improvement of scenic stability when carried out at a landscape scale.

This treatment will create stumps, slash and duff disturbance will be visible from foreground views. These effects will be minor within the first one to two years. As regrowth of shrubs and grasses occur these effects will be significantly reduced. This prescription does not create openings that area visible from middleground or background distances. The effects of this prescription do not reduce the scenic integrity of the unit.

#### **Improvement Harvest (HIM)**

This prescription removes some of the overstory trees to release the more viable understory trees to keep the stand health and more resistant to stand replacement fires and insects and disease. Treatments such as these open up the canopy producing textural change visible for middleground views. Foreground views will be affected by stumps, slash and occasional skid trails. The resulting open canopy will allow more

light to reach the forest floor, creating a dappled shadow appearance. These effects are short term impacts to the immediate foreground and are addressed with project design features.

#### **Cottonwood Enhancement- Conifer Removal**

Cottonwood stands provide diverse color in the area. This treatment removes conifers within and around the cottonwood stands to reduce the depletion of soil moisture that kills the root system. This treatment will create no effects to middleground or background views. Foreground views will be affected by remaining stumps. Slash is limited by whole tree yarding. This treatment serves to preserve the scenic attribute of cottonwood stands.

#### **Underburning Natural Fuels or Activity Fuels (RXF)**

Underburning natural fuels (RXF) is a treatment used to reduce litter and ladder fuels. Effects to scenery are minimal and short lived. A growing season reduces the effects to the remaining scorched tree trunks, and dead saplings. This treatment most successfully conserves scenery resources when thorough site preparation is done prior to underburning. Fire, at low intensity is a natural occurrence in this area, and its effects do not degrade the scenic quality. This treatment can greatly improve a stand's resiliency to large stand replacement fire which can affect the scenic quality.

#### **Site Preparation- Underburning**

The effects of this treatment are similar to the underburning of natural fuels, however the scorching and soil exposure is more intense. These effects are consistent with low intensity fire.

#### **Pre-commercial Thinning (PCT)**

This treatment reduces stocking levels to promote growth of desirable species, reduce disease, the threat of future insect outbreaks and ladder fuels that increase fire intensity and the occurrence of crown fires. Removal of these trees opens view into stands. The effects to scenery are limited to foreground view effects of stumps, and slash. See project design features for mitigation of these effects.

#### **Leave Top Attached (LTA) and Whole Tree Yarding (WTY)**

Slash is reduced when tops are left attached and trees are yarded whole to the landing. This effectively leaves the forest floor cleaner with less slash and ladder fuel, which helps reduce fire intensity.

### **Design Features and Mitigation Measures**

Effects of the action alternatives are based on the full implementation of the following mitigation measures to minimize the effects of logging activities:

- ☐ Screen landings from Forest roads 77, 7755, and developed recreation sites.
- ☐ Limit naturally shaped openings to be a maximum of 5 to 10 acres in size with blended edges. In areas of Retention and Partial Retention in both Middle and Background from Forest roads 77, and 7755.
- ☐ New temporary roads and landings may be evident but must remain subordinate to the shape and pattern of the natural appearing forest canopy. In areas of Retention and Partial Retention foreground from Forest roads 77 and 7755.
- ☐ In areas of Retention and Partial Retention in both Middle and Background from Forest roads 77, and 7755 foreground clearings (not to exceed 2 acres) should not be used frequently but can be used in specific circumstances to treat insect or disease infestations, or to open views to scenic attributes such as rock formations, large ponderosa pine or components, or views to distant mountain peaks.

- ❑ In areas of Retention foreground as seen from Forest roads 77 and 7755 skid patterns, slash, soil exposure and stumps should be visually minor or unnoticed (4" maximum height of stumps).
- ❑ Cut stumps at a height less than 4" that are within 100' of Forest road 7755 within the Wild and Scenic River Corridor.
- ❑ Slash piles shall not be located within the immediate Foreground, (100') of Forest roads 77, 7755, and developed recreation sites.
- ❑ After burning piles within landings, scatter residue of burn piles and seed area within the areas of Foreground.

### ***Alternative 2 – Proposed Action***

Alternative 2 is a set of stand and fuels treatments designed to address the purpose and need. This alternative is fully defined in the EA under Alternative Description. The treatments would improve the long term scenic integrity, by opening the stands up for increased visibility and visual diversity.

Alternative 2 would increase visibility into stands by opening up the mid canopy, creating greater foreground diversity. The partial removal and commercial harvest treatments would leave the pine and larch species that have the desired large tree character, and greater fire resiliency. This effort would improve the scenic character and the scenic stability of the area. These treatments would improve scenic stability (SMS Appendix J).

### ***Scenic Integrity***

This historic character is more fire resistant which will improve the scenic stability by reducing the risk of large uncharacteristic fire. The logging activities will cause short-term effects that will reduce scenic integrity for a period of 1-3 years.

### **Road 77**

The VQO within the West Eagle Creek corridor is partial retention. The units that are in the foreground of this viewshed are upslope and screened by roadside vegetation. Therefore any stumps created would not be visible. Units that are within the middleground of this viewshed would create an increase in coarse texture due to greater basal areas. This impact would meet the partial retention VQO.

### **Roads 7755**

The viewshed of Road 7755 is classified as retention. Prescriptions of overstory removal, intermediate harvest will create visual impacts associated with duff disturbance, slash treatments and stumps. Prescribed fire will create short term effects of scorching and pockets of dead trees. Retention would be met.

### **Eagle Creek Wild and Scenic River Corridor**

Alternative 2 proposes to treat 626 acres (commercial, noncommercial, and prescribed burning) within the WSR corridor. The river corridor is in a deep canyon where the visibility is limited by the steep slopes and canyon rim.

Of the 626 acres visible within the WSR corridor 153 acres are prescribed fire. Prescribed fire is a preferred treatment for managing vegetation within the Eagle Creek WSR.

The units within the Eagle Creek Wild and Scenic River Corridor are within a retention foreground VQO. The effects of the intermediate harvest and prescribed fire prescriptions will meet the VQOs. The commercial thinning harvest units are at a distance that no stumps, slash treatments or duff disturbance would be visible. Changes in texture would be created but would still meet retention. Units 2, 5, 6, 49 require skyline logging which will create a short term effect associated with a skyline corridor that will not be visible after a year. The natural appearing scenery would be retained. Foreground views would not be affected by the treatments. The project improves the resiliency as well as improves a fire suppression effort.

which is crucial to protecting the scenery resources of the Wild and Scenic River. This table shows a breakdown of treated visible acres.

### ***Scenic Stability***

The harvest and prescribed fire prescriptions proposed in Alternative 2 are designed to address the closed canopy, high density; fire-prone conditions that support stand replacement fire. The treatments would serve to improve the overall scenic stability by addressing the conditions that put scenic attributes at risk of stand replacement fire and insect and disease epidemics. It is not expected that the risk will be eliminated. However, the treatments would improve opportunities for firefighters to minimize the fire effects.

By favoring the fire resilient ponderosa pine and western larch, this alternative would move the stands toward the desired scenic character which is more resilient to fire. By reducing stand density, the remaining stands are less susceptible to insect and disease infestations and epidemics. By reducing ladder fuels, crown lengths are minimized giving greater opportunity for fire fighters to control the fire before it becomes a crown fire that would burn a much larger area than is historically characteristic.

### ***Alternative 2M***

Alternative 2M would maintain the same level of commercial harvest within the WSR corridor as Alternative 2. However, there would be an increase of 27 acres in noncommercial activities over Alternative 2, and an increase in prescribed burning of 114 acres.

In the stands treated under Alternative 2M, it would increase visibility into stands by opening up the mid and upper canopy, creating greater foreground and midground diversity. The partial removal and commercial harvest treatments would leave the pine and larch species that have the desired large tree character, and greater fire resiliency. This effort would improve the scenic character and the scenic stability of the area to a slightly greater degree than Alternative 2.

### ***Scenic Integrity***

Short term effects that would occur are those described in the effects common to all action alternatives. Foreground views would experience more open stands and greater viewing distance into the stands. Middleground views would have visible alteration to textures created by thinning units. Like Alternative 2, this alternative would meet the VQOs of the Eagle Creek WSR. There would be very little difference in effects to scenery between Alternatives 2 and 2M.

### ***Scenic Stability***

Conditions currently that support stand replacement fire which poses substantial risk to the scenic attributes of the area. Treatments until Alternative 2M would improve these conditions (SMS Appendix J).

### ***Alternative 3***

Alternative 3 would reduce commercial harvest treatments in the WSR corridor by 76 acres as compared to Alternative 2, while increasing noncommercial and prescribed burning treatments by 76 acres and 114 acres, respectively.

In the stands treated under Alternative 3, it would increase visibility into stands by opening up the mid canopy, creating greater foreground diversity. The partial removal and commercial harvest treatments would leave the pine and larch species that have the desired large tree character, and greater fire resiliency. This effort would improve the scenic character and the scenic stability of the area. However, the improvement would be to a lesser degree than Alternative 2. While the stands that would not be treated in this are not historically characteristic of the area and would continue to have conditions that are susceptible to fire, this would not be a notable affect to the overall scenic integrity or stability.



### ***Scenic Integrity***

Short term effects that would occur are those described in the effects common to all action alternatives. Foreground views would experience more open stands and greater viewing distance into the stands. Middleground views would have visible alteration to textures created by thinning units. Like Alternative 2, this alternative would meet the VQOs of the Eagle Creek WSR. There would be very little difference in effects to scenery between Alternatives 2 and 3.

### ***Scenic Stability***

Conditions currently that support stand replacement fire which poses substantial risk to the scenic attributes of the area. Treatments under Alternative 3 would improve these conditions (SMS Appendix J).

## **Cumulative Effects**

### ***Alternative 1 – No Action***

Continuing trends of increased understory vegetation will reduce views in and through the forest at the eye level in foreground views and thus reducing the diversity of color and texture available to viewers.

Within the next 20 to 30 years, acres identified as Condition Class 2 will convert to Condition Class 3 increasing the acres in Condition Class 3 which pose high risk to scenery resources during wildfire.

### ***Alternatives 2, 2M, and 3***

The treatments that reduce flame length such as prescribed fire (RXF) treatments that reduce ladder fuels create indirect effects to scenery by providing greater firefighting opportunities if a fire should occur. This in turn will most likely indirectly affect the size and severity of fire events thus reducing the effects to scenery resources. It is expected that it will be much more likely that effects of fires in this area will remain within the size and severity characteristic to the historical range.

This area has past timber sales and other management activities. The timber sales 20 years and older have no remaining scenery effects to scenic integrity. Any openings created during this time have since been populated by trees and thus eliminated the openings. Alternatives 2, 2M, and 3 would similarly address these issues throughout the area to have a cumulative positive effect to scenic stability while maintaining the scenic integrity.

No present or reasonably foreseeable future activities which overlap in time and space with the Two Eagle project would have a measurable effect on scenery and visual resources when combined with the activities proposed under the action alternatives in Two Eagle (Appendix D of the EA). Therefore, there are no cumulative effects expected from the action alternatives.

## **Summary of Effects**

Alternative 2M would treat 43 more acres than Alternative 2, while Alternative 3 would treat 461 less acres than Alternative 2. Deferring treatment of non-fire resilient stands would perpetuate the existing condition in these stands thus reducing the effectiveness of the treatments to improve their vegetative resiliency to disturbance factors such as fire, insects, and disease.

The action alternatives all meet Forest Plan VQOs and WSR objectives and standards. The alternatives all retain the existing VQOs and therefore meet the Forest Plan Standards and Guides for Scenery. They all achieve an improvement in scenic stability.

### **Compliance with Forest Plan and Other Relevant Laws, Regulations, Policies and Plans**

Alternative 1 is compliant with the Visual Quality Objectives that are Forest Plan Standards.

It is expected that Alternatives 2, 2M, and 3 would not reduce the scenic integrity and thus retain the existing visual quality objective standards established in the Forest Plan, and the Eagle Creek Wild and Scenic River Management Plan.

### ***References***

- USDA (1974). National Forest Landscape Management Volume 2, Chapter 2, The Visual Management System. Agricultural Handbook Number 462, USDA Forest Service.
- USDA (1997). Landscape Aesthetics, Agricultural Handbook #701.
- USDA (2008). Landscape Aesthetics, Agricultural Handbook #701, Appendix J